

# Lectotypification of *Abutilon ranadei* and *Erinocarpus nimmonii* (Malvaceae)

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#### Abstract

Abutilon ranadei Woodrow & Stapf and Erinocarpus nimmonii J. Graham are lectotypified.

Keywords: Amba Ghat, Lectotype, Syntype

#### Introduction

The genus *Abutilon* Mill. is represented by 160 species distributed in tropics and warm countries (Mabberley, 2008). In India the genus is represented by 12 species (Sharma & Sanjappa, 1993). *Abutilon ranadei* is a narrow endemic species known only from a few localities in the Northern Western Ghats. *Erinocarpus* Nimmo ex J. Graham is a monotypic endemic tree genus of Western Ghats of Maharashtra and Karnataka (Sharma & Sanjappa, 1993).

Critical examination of the protologues of the above species revealed that these names are not lectotypified. In present communication *A. ranadei* and *E. nimmonii* are lectotypified following Art. 9.2 & 9.11 of Melbourne Code (McNeill *et al.*, 2012), and images of the designated lectotypes are also provided.

Abutilon ranadei Woodrow & Stapf, Bull. Misc. Inform. Kew 99. 1894; T. Cooke, Fl. Pres. Bombay 1: 101. 1958; T. K. Paul in B.D. Sharma & Sanjappa (Eds.), Fl. India 3: 273. 1993; M. R. Almeida, Fl. Maharashtra 1: 102. 1996; Venkanna & Das Das in N. P. Singh *et al.* (eds.), Fl. Maharashtra, Dicot. 1: 299. 2000; Bachulkar & S. R. Yadav, J. Bombay Nat. Hist. Soc. 94: 591. 1997; S.R.Yadav & Sardesai, Fl. Kolhapur District. 68. 2002.

**Lectotype** (designated here): INDIA. **Maharashtra**; Amba Ghat, Kolhapur-Ratnagiri Road18 Dec. 1853, *N. B. Ranade s.n.* (K000659531!) **Fig. 1** 

Woodrow and Stapf (1894) described Abutilon

ranadei based on the collections from Amba Ghat by N. B. Ranade. However, they have not cited any specimen in the protologue except its precise locality *i.e.* Ratnagiri, Amba Ghat. We could trace 3 specimens, two at K (K000659531; K000659532) and one at BM (BM 000645030). Specimens housed both at BM and K (K000659531) agrees well with the protologue and bear annotation by Ranade. Hence they can be considered as original materials to be selected as lectotype. Specimen at K (K000659531) has flower as well as fruit hence we have selected it as lectotype here.

Specimen with barcode number K000659532 bears an annotation by Rowjee but collected on same date and from same locality. In spite of this it is uncertain whether the authors have used this specimen or not while describing this species. Hence it has not been considered as part of original material.

Erinocarpus nimmonii J. Graham, Cat. Pl. Bombay 21. 1839; Dalzell & A. Gibson, Bombay Fl. 27. 1861; T. Cooke, Fl. Pres. Bombay 1: 155. 1958; Mast. in Hook.f., Fl. Brit. India 1:394. 1874 (nimmoanus); P. Daniel & Chandrab. in B. D. Sharma & Sanjappa (eds.), Fl. India. 3: 490, 1993; M. R. Almeida, Fl. Maharashtra 1: 152. 1996; S. G. Pradhan in N. P. Singh et al., Fl. Maharashtra, Dicot 1: 383. 2000; S. R. Yadav & Sardesai, Fl. Kolhapur District 81. 2002.

**Lectotype** (designated here): INDIA. **Maharashtra**; Bombay, *s.d.*, *Law s.n.* (K00068636!) **Fig. 2.** 



Fig.1. Lectotype of Abutilon ranadei (N.B. Ranade s.n., K) [Reproduced with kind permission of the Board of Trustees, Royal Botanic Gardens, Kew.]

Graham (1839) described *E. nimmonii* without citing the specimens; however he has cited localities such as 'Kandalla, tops of Carinjah hills, Concan, Jambotee near Belgaum'. He cited 'Mr. Law' in the protologue. We assume that he had seen the collections of Mr. Law. We could trace three specimens at K; one of which bears the annotation "Erinocarpus nimmonni Law". One of the other two specimens bears collectors name "Stocks" while the other one is without collectors name and number and bears "Hills of Deccan" as its collection location. But neither "Stocks" nor "Hills of Deccan" is cited in the protologue. Also the name E. nimmnianus (dt. 1874) is also written on the labels. Stocks were born in 1822 and Graham's publication was in 1839, hence it is evident that Stocks's collection is likely made after 1839. Therefore, Stock's specimens as a part of the original materials are very unlikely (K. N. Gandhi pers. Com.). The specimen (K00068636) collected



Fig. 2. Lectotype of *Erinocarpus nimmonii* (*Law s.n.* K) [Reproduced with kind permission of the Board of Trustees, Royal Botanic Gardens, Kew.]

by Law agrees well with the protologue and represent a complete specimen, hence it is selected here as the lectotype.

Masters (1874) wrongly spelled the species as 'E. nimmoanus'; however he provided the reference to protologue. This name does not have any status and Masters (1874) also not claimed that he is describing the new species; however the plant name indices like www.ipni.org and www. tropicos.org cited this name as 'E. nimmoanus Mast' which is an error.

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### Literature Cited

- **Graham, J. 1839.** A catalogue of the plants growing in Bombay and its vicinity. Government Press, Bombay. p. 21
- **Mabberley, D.J. 2008.** Mabberley's Plant book, a portable dictionary of plants, their classification and uses, 3<sup>rd</sup> edn. Cambridge University Press, Cambridge.
- **Master, M.T. 1874.** Malvaceae. In: Hooker, J.D. (Ed.) *Flora of British India*. Vol **1.** London. pp. 317–353.

- McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold K., Prado, J., Prud'homme van Reine, W.F., Smith G.F., Wiersema, J.H., & N.J. Turland 2012. International code of Nomenclature for algae, fungi and plants (Melbourne code). Regnum veg. 154. Koeltz Scientific Books Koenigstein.
- Sharma, B.D. & M. Sanjappa 1993. Flora of India vol.3. Botanical Survey of India, Kolkata.
- Woodrow, G.M. & O. Stapf 1894. Decades Kewenses. Plantarum Novarum in Herbario Horti Regii Conservatarum. Decas VIII. *Bull. Misc. Inform. Kew.* 87: 99.

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